ALCATEL-LUCENT LIGHTRADIO 9764 METRO CELL OUTDOOR

V1.0 2X5W B13 LTE

The Alcatel-Lucent lightRadioTM 9764 Metro Cell Outdoor 2x5W V1.0 B13 LTE is a next-generation radio based on Alcatel-Lucent Bell Labs groundbreaking lightRado technology that brings together the latest innovations in amplifiers and transceivers to minimize size and improve radio frequency (RF) performance. Operating in the Band 13 Upper C block frequencies, the 9764 MCO 2x5W V1.0 B13 LTE can be used to cost effectively extend LTE coverage and capacity to dense urban areas, large public venues, and rural areas. The 9764 MCO 2x5W V1.0 B13 LTE covers indoor and outdoor locations, such as restaurants, stores, hotels, offices and city streets.

Alcatel-Lucent 9764 Metro Cell Outdoor 2x5W V1.0 B13 LTE is easily deployed almost anywhere without the complexity or cost associated with traditional macro cell site installation. With its small dimensions and volume, the 9764 MCO2x5W V1.0 B13 LTE may be mounted on a platform, pole or on the side of a building to deliver coverage and capacity directly to where it is needed. Network deployment, optimization costs, Real-time operational status and service monitoring of the 9764 MCO2x5W V1.0 B13 LTE are also significantly reduced with the support and evolution of Self-Organizing Network (SON), and service monitoring features. SON technology increases operational efficiency and network performance by automating network configuration and optimization.

The 9764 MCO2x5W V1.0 B13 LTE is one of the latest enhancements to the industry leading Alcatel-Lucent Small Cell solutions.

FEATURES

- Small, lightweight unit that can be mounted on a wall, the side of a building or pole and blend into the environment.
- Has two external Rx/Tx antenna connectors.
- Supports GPS phase synchronization.
- Supports LTE technology (FDD).
- Two path receive diversity and 2x2 multiple-input multiple-output (MIMO)
- Supports optical Gigabit Ethernet (GbE) backhaul.
- Is compliant with FCC and 3GPP TS 36.104 requirements for Wide Area Base Station
- Is connected to 3GPP EPC through standard S1 interfaces.
- Handovers to and from macro network

BENEFITS

- Easily deployed almost anywhere
- Fast and reliable data connections and high data throughput
- Extends LTE macro coverage and capacity to both outdoor and indoor locations with a low total cost of ownership (TCO)
- Seamless mobility with simultaneous voice and data service continuity within a metro cell group and with the macro network
- Uses common provisioning, supervision and optimization tool suite as a Macro eNodeB.
- Integrates seamlessly into the operator's existing LTE network.

TECHNICAL SPECIFICATIONS

Physical dimensions

- Height: 400 mm (15.8 in.)
- Width: 286 mm (11.3 in.)
- Depth: 175 mm (6.9 in.)
- Volume: 20L
- Solarshield not included

Weight

- Approximately 18 kg (40 lbs)

Mount

- Pole, wall, or platform mountable
- Vertical orientation

Power

- 120 to 240 V AC, (60 Hz, Single Phase), 200 W (max)
- -48 V DC, 170 W (max)

Interfaces

- GPS antenna
- GbE over Small Form Factor Pluggable (SFP) transceiver supporting 1000Base-X optical
- Supports S1 and X2 interface
- 2x2 MIMO
- Is connected to 3GPP EPC through standard S1 interfaces.

Certification

- CSA
- FCC Class B

Compliance

- RoHS
- WEEE

Temperature range

- -40°C to +55°C (-40°F to 131°F) (with optional solar shield)

Radio characteristics

- Operating bands: 3GPP band 13 Maximum transmission power: 2x37 dBm (2x5W)
- 2x2 MIMO – 2Rx diversity is on MIMO mode)
- 10 MHz bandwidth
- Baseband capacity:
  - ¬ 200 active users by Dec 2013
  - ¬ 600 connected users by 3Q 2014
- Maximum data rates
  - ¬ 60 Mbps downlink
  - ¬ 20 Mbps uplink
- Receive sensitivity: -101.5 dBm at antenna port connector

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